What is claimed is:

1   1.   A distribution system that distributes a program
2   for decoding encoded audio data, comprising:

3   a distribution server device which sends the
4   program;

5   a removable memory unit which has an area for storing
6   one or more programs;

7   an acquisition device which, being connected to the
8   distribution server device via a network and loaded with
9   the removable memory unit, acquires the program from the
10 distribution server device and stores the program into
11 the removable memory unit; and

12   an audio reproduction device which, being loaded
13 with the removable memory unit storing the program,
14 decodes the encoded audio data using the program, and
15 outputs sounds.

1   2.   The distribution system of Claim 1,

2   wherein the removable memory unit stores one or more
3   programs which are each used for decoding encoded audio
4   data of a different type,

5   the audio reproduction device stores a detection
6   module beforehand, the detection module being a program
7   module used for detecting a type of the encoded audio data,
8   and

9   the audio reproduction device detects the type of
10 the encoded audio data using the detection module, reads
11 the program for decoding encoded audio data of the detected
12 type from the removable memory unit, and decodes the
13 encoded audio data using the read program.

1   3. The distribution system of Claim 2,
2   wherein the distribution server device sends
3 permission information which indicates that the program
4 is permitted to use, in correspondence with the program,
5   the acquisition device acquires the permission
6 information, and stores the permission information into
7 the removable memory unit in correspondence with the
8 program, and
9   the audio reproduction device decodes the encoded
10 audio data using the program, only when the permission
11 information corresponding to the program is stored in the
12 removable memory unit.

1   4. The distribution system of Claim 3,
2   wherein the distribution server device sends
3 condition information which shows a condition for using
4 the program, in correspondence with the program,
5   the acquisition device acquires the condition
6 information, and stores the condition information into

7 the removable memory unit in correspondence with the

8 program, and

9   the audio reproduction device judges whether the

10 program is permitted to use based on the condition shown

11 by the condition information stored in the removable

12 memory unit, and decodes the encoded audio data using the

13 program only when the program is judged as being permitted

14 to use.

1   5. The distribution system of Claim 4,

2   wherein the condition information is period

3 information that limits a period during which the program

4 is permitted to use,

5   the distribution server device sends the period

6 information,

7   the acquisition device acquires the period

8 information and stores the period information into the

9 removable memory unit, and

10   the audio reproduction device judges that the

11 program is permitted to use, if current date and time is

12 within the period shown by the period information.

1   6. The distribution device of Claim 4,

2   wherein the condition information is number

3 information which limits a remaining number of times the

4 program is permitted to use,

5   the distribution server device sends the number

6 information,

7   the acquisition device acquires the number

8 information and stores the number information into the

9 removable memory unit, and

10   the audio reproduction device judges that the

11 program is permitted to use, if the number shown by the

12 number information is not smaller than 1, the number being

13 decreased by 1 each time the audio reproduction device

14 decodes encoded audio data using the program.

1   7. The distribution system of Claim 3,

2   wherein the distribution server device generates a

3 user identifier which identifies a user of the audio

4 reproduction device, stores the generated user identifier,

5 and also sends the generated user identifier, and

6   the acquisition device acquires the user identifier

7 and stores the user identifier into the removable memory

8 unit.

1   8. The distribution system of Claim 7 that further

2 distributes maintenance information for updating the

3 program,

4   wherein the acquisition device reads the user

5   identifier from the removable memory unit, and sends the

6   user identifier to the distribution server device,

7   the distribution server device (a) stores the

8   maintenance information beforehand in correspondence

9   with the program, (b) receives the user identifier, (c)

10   judges whether the received user identifier matches the

11   user identifier stored in the distribution server device,

12   and (d) sends the maintenance information if the two user

13   identifiers are judged as matching, and

14   the acquisition device acquires the maintenance

15   information, and updates the program stored in the

16   removable memory unit using the acquired maintenance

17   information.

1   9. The distribution system of Claim 8,

2   wherein the distribution server device generates a

3   permission information identifier which identifies the

4   permission information, stores the generated permission

5   information identifier, and also sends the generated

6   permission information identifier, and

7   the acquisition device acquires the permission

8   information identifier, and stores the permission

9   information identifier into the removable memory unit.

1   10. The distribution system of Claim 9,

2   wherein the acquisition device reads the permission

3 information identifier from the removable memory unit,

4 and sends the permission information identifier to the

5 distribution server device, and

6   the distribution server device (a) receives the

7 permission information identifier, (b) judges whether the

8 received permission information identifier matches the

9 permission information identifier stored in the

10 distribution server device, and (c) sends the

11 maintenance information if the two permission information

12 identifiers are judged as matching.

1   11. The distribution system of Claim 3 further

2 comprising an account server device,

3   wherein the acquisition device is connected to the

4 account server device via the network, and sends payment

5 information to the account server device, the payment

6 information indicating that payment has been made for the

7 acquisition of the program,

8   the account server device is connected to the

9 distribution server device via the network, and when

10 receiving the payment information, sends confirmation

11 information to the distribution server device, the

12 confirmation information confirming that the payment has

13 been made for the acquisition of the program, and

14   the distribution server device sends the program,

15 when receiving the confirmation information.

1   12. The distribution system of Claim 2,

2   wherein the distribution server device sends an

3   alternative detection module that is a program module used,

4   instead of the detection module stored in the audio

5   reproduction device, for detecting the type of the encoded

6   audio data,

7   the acquisition device acquires the alternative

8   detection module from the distribution server device, and

9   stores the alternative detection module into the

10 removable memory unit, and

11   the audio reproduction device reads the alternative

12 detection module from the removable memory unit, and

13 detects the type of the encoded audio data using the

14 alternative detection module instead of the detection

15 module.

1   13. An audio reproduction device for decoding

2   encoded audio data and outputting sounds in a distribution

3   system that includes a distribution server device, an

4   acquisition device, and the audio reproduction device,

5   wherein the distribution server device sends a program

6   for decoding the encoded audio data to the acquisition

7   device via a network, a removable memory unit is loaded

8   to the acquisition device, the acquisition device writes

9   the program into the removable memory unit, and the

10   removable memory unit storing the program is loaded to

11   the audio reproduction device, the audio reproduction

12   device comprising:

13   a reading unit operable to read the program from the

14   removable memory unit;

15   a decoding unit operable to decode the encoded audio

16   data using the program, to generate audio data; and

17   a sound outputting unit operable to convert the audio

18   data to the sounds and output the sounds.

1   14. The audio reproduction device of Claim 13,

2   wherein the removable memory unit stores one or more

3   programs which are each used for decoding encoded audio

4   data of a different type,

5   the audio reproduction device further comprises:

6   a storage area which stores a detection module

7   beforehand, the detection module being a program module

8   used for detecting a type of the encoded audio data, and

9   the decoding unit detects the type of the encoded

10   audio data using the detection module, reads the program

11   for decoding encoded audio data of the detected type from

12   the removable memory unit, and decodes the encoded audio

13 data using the read program.

1   15. The audio reproduction device of Claim 14,
2   wherein the removable memory unit stores permission
3 information indicating that the program is permitted to
4 use, in correspondence with the program, and
5   the decoding unit decodes the encoded audio data
6 using the program, only when the permission information
7 corresponding to the program is stored in the removable
8 memory unit.

1   16. The audio reproduction device of Claim 15 further
2 comprising:
3   a displaying unit operable to display a message
4 indicating that the program is prohibited to use, when
5 the permission information is not stored in the removable
6 memory unit.

1   17. The audio reproduction device of Claim 15,
2   wherein the removable memory unit stores condition
3 information showing a condition for using the program,
4 in correspondence with the program, and
5   the decoding unit judges whether the program is
6 permitted to use based on the condition shown by the
7 condition information stored in the removable memory unit,

8   and decodes the encoded audio data using the program when

9   the program is judged as being permitted to use.

1   18. The audio reproduction device of Claim 17,

2   wherein the condition information is period

3   information that limits a period during which the program

4   is permitted to use, and

5   the decoding unit judges that the program is

6   permitted to use, if current date and time is within the

7   period shown by the period information.

1   19. The audio reproduction device of Claim 17,

2   wherein the condition information is number

3   information that limits a remaining number of times the

4   program is permitted to use, and

5   the decoding unit judges that the program is

6   permitted to use, if the number shown by the number

7   information is not smaller than 1, the number being

8   decreased by 1 each time the decoding unit decodes encoded

9   audio data using the program.

1   20. The audio reproduction device of Claim 15 further

2   comprising:

3   a displaying unit operable to display an identifier

4   that identifies the program which is permitted to use,

5   based on the permission information stored in the
6   removable memory unit.

1   21. The audio reproduction device of Claim 15,
2   wherein the program is made up of subprograms,
3   the audio reproduction device further comprises:
4   a subprogram storage area which is used for storing
5   a subprogram; and
6   a loading unit operable to write the subprograms in
7   sequence into the subprogram storage area, and
8   the decoding unit decodes the encoded audio data
9   using the subprograms written in the subprogram storage
10 area.

1   22. The audio reproduction device of Claim 15,
2   wherein the program is made up of subprograms,
3   the audio reproduction device further comprises:
4   two subprogram storage areas which are each used for
5   storing a subprogram; and
6   a loading unit operable to write the subprograms in
7   sequence into the two subprogram storage areas
8   alternately, and
9   the decoding unit decodes the encoded audio data,
10 alternately using the subprograms written in the two
11 subprogram storage areas.

1   23. The audio reproduction device of Claim 15,

2   wherein the removable memory unit stores a unique

3 program beforehand, instead of the program,

4   the audio reproduction device further comprises:

5   a ROM storing unit which is made of a read-only

6 semiconductor memory and stores a common subprogram

7 beforehand, the program being made up of the unique

8 subprogram and the common subprogram;

9   a RAM storing unit which is made of a readable and

10 rewritable semiconductor memory, and has an area for

11 storing the unique subprogram; and

12   a loading unit operable to read the unique subprogram

13 from the removable memory unit, and write the unique

14 subprogram into the RAM storing unit, and

15   the decoding unit decodes the encoded audio data,

16 using the common subprogram and the unique subprogram

17 which are respectively stored in the ROM storing unit and

18 the RAM storing unit.

1   24. The audio reproduction device of Claim 14,

2   wherein the removable memory unit stores an

3 alternative detection module which is a program module

4 used, instead of the detection module stored in the audio

5 reproduction device, for detecting the type of the encoded

6   audio data, the alternative detection module being sent

7   from the distribution server device to the acquisition

8   device and written into the removable memory unit by the

9   acquisition device,

10   the audio reproduction device further comprises:

11   a loading unit operable to read the alternative

12   detection module from the removable memory unit, and write

13   the alternative detection module into the storage area,

14   and

15   the decoding unit detects the type of the encoded

16   audio data using the alternative detection module instead

17   of the detection module.

1   25. An audio reproduction device for decoding

2   encoded audio data and outputting sounds in a distribution

3   system that includes a distribution server device, an

4   acquisition device, and the audio reproduction device,

5   wherein the distribution server device sends a program

6   for decoding the encoded audio data to the acquisition

7   device via a network, the audio reproduction device is

8   connected to the acquisition device, and the acquisition

9   device writes the program into a program storing unit in

10   the audio reproduction device, the audio reproduction

11   device comprising:

12   the program storing unit which stores one or more

13 programs which are each used for decoding encoded audio

14 data of a different type;

15 a module storing unit which stores a detection module

16 beforehand, the detection module being a program module

17 used for detecting a type of the encoded audio data;

18 a decoding unit operable to detect the type of the

19 encoded audio data using the detection module, read the

20 program for decoding encoded audio data of the detected

21 type from the program storing unit, and decode the encoded

22 audio data using the read program to generate audio data;

23 and

24 a sound outputting unit operable to convert the audio

25 data to the sounds and output the sounds.

1 26. A distribution server device that sends a program

2 for decoding encoded audio data, to an acquisition device

3 via a network, comprising:

4 a storing unit which stores the program and

5 permission information in correspondence beforehand, the

6 permission information indicating that the program is

7 permitted to use;

8 a reading unit operable to read the program and the

9 permission information from the storing unit; and

10 a sending unit operable to send the program and the

11 permission information to the acquisition device via the

12   network.

1   27. An acquisition device for acquiring a program

2   for decoding encoded audio data, from a distribution

3   server device, comprising:

4   a receiving unit operable to receive the program and

5   permission information indicating that the program is

6   permitted to use, from the distribution server device to

7   which the acquisition device is connected via a network;

8   and

9   a writing unit operable to write the program and the

10   permission information into a removable memory unit.

1   28. A removable memory medium comprising:

2   a non-authentication storage area which stores a

3   program for decoding encoded audio data; and

4   an authentication storage area which stores

5   permission information indicating that the program is

6   permitted to use, in correspondence with the program,

7   wherein an access device is allowed to access the

8   authentication storage area only when the access device

9   has succeeded in mutual device authentication with the

10   removable memory medium.

1   29. The removable memory medium of Claim 28,

2   wherein the non-authentication storage area also
3   stores a detection module used for detecting a type of
4   the encoded audio data.

1   30. A distribution method for use in a distribution
2   system that distributes a program for decoding encoded
3   audio data, the distribution system including: a
4   distribution server device; a removable memory unit
5   having an area for storing the program; an acquisition
6   device which is connected to the distribution server
7   device via a network and loaded with the removable memory
8   unit; and an audio reproduction device which is loaded
9   with the removable memory unit, the distribution method
10   comprising:
11   a distribution server step, executed by the
12   distribution server device, for sending the program for
13   decoding the encoded audio data;
14   an acquiring step, executed by the acquisition
15   device, for acquiring the program and storing the program
16   into the removable memory unit; and
17   an audio reproducing step, executed by the audio
18   reproduction device, for decoding the encoded audio data
19   using the program stored in the removable memory unit,
20   and outputting sounds.

1   31. An audio reproduction method for use in an audio
2   reproduction device that decodes encoded audio data and
3   outputs sounds, wherein a distribution server device
4   sends a program for decoding the encoded audio data to
5   an acquisition device via a network, a removable memory
6   unit is loaded to the acquisition device, the acquisition
7   device writes the program into the removable memory unit,
8   and the removable memory unit storing the program is loaded
9   to the audio reproduction device, the audio reproduction
10   method comprising:

11   a reading step for reading the program from the
12   removable memory unit;

13   a decoding step for decoding the encoded audio data
14   using the program, to generate audio data; and

15   a sound outputting step for converting the audio data
16   to the sounds and outputting the sounds.

1   32. A computer-readable recording medium recording
2   a distribution program for use in a distribution computer
3   system that distributes a program for decoding encoded
4   audio data, the distribution system including: a
5   distribution server device; a removable memory unit
6   having an area for storing the program; an acquisition
7   device which is connected to the distribution server
8   device via a network and loaded with the removable memory

9 unit; and an audio reproduction device which is loaded
10 with the removable memory unit, the distribution program
11 comprising:

12   a distribution server step, executed by the
13 distribution server device, for sending the program for
14 decoding the encoded audio data;

15   an acquiring step, executed by the acquisition
16 device, for acquiring the program and storing the program
17 into the removable memory unit; and

18   an audio reproducing step, executed by the audio
19 reproduction device, for decoding the encoded audio data
20 using the program stored in the removable memory unit,
21 and outputting sounds.

1   33. A computer-readable recording medium recording
2 an audio reproduction program for use in a computer that
3 decodes encoded audio data and outputs sounds, wherein
4 a distribution server device sends a program for decoding
5 the encoded audio data to an acquisition device via a
6 network, a removable memory unit is loaded to the
7 acquisition device, the acquisition device writes the
8 program into the removable memory unit, and the removable
9 memory unit storing the program is loaded to the computer,
10 the audio reproduction program comprising:

11   a reading step for reading the program from the

12   removable memory unit;

13   a decoding step for decoding the encoded audio data

14   using the program, to generate audio data; and

15   a sound outputting step for converting the audio data

16   to the sounds and outputting the sounds.

1   34. A distribution program for use in a distribution

2   computer system that distributes a program for decoding

3   encoded audio data, the distribution system including:

4   a distribution server device; a removable memory unit

5   having an area for storing the program; an acquisition

6   device which is connected to the distribution server

7   device via a network and loaded with the removable memory

8   unit; and an audio reproduction device which is loaded

9   with the removable memory unit, the distribution program

10   comprising:

11   a distribution server step, executed by the

12   distribution server device, for sending the program for

13   decoding the encoded audio data;

14   an acquiring step, executed by the acquisition

15   device, for acquiring the program and storing the program

16   into the removable memory unit; and

17   an audio reproducing step, executed by the audio

18   reproduction device, for decoding the encoded audio data

19   using the program stored in the removable memory unit,

20   and outputting sounds.

1   35. An audio reproduction program for use in a
2   computer that decodes encoded audio data and outputs
3   sounds, wherein a distribution server device sends a
4   program for decoding the encoded audio data to an
5   acquisition device via a network, a removable memory unit
6   is loaded to the acquisition device, the acquisition
7   device writes the program into the removable memory unit,
8   and the removable memory unit storing the program is loaded
9   to the computer, the audio reproduction program
10 comprising:
11   a reading step for reading the program from the
12 removable memory unit;
13   a decoding step for decoding the encoded audio data
14 using the program, to generate audio data; and
15   a sound outputting step for converting the audio data
16 to the sounds and outputting the sounds.